DEPARTMENT OF THE ARMY
HEADQUARTERS, UNITED STATES ARMY MEDICAL COMMAND
2050 Worth Road
Fort Sam Houston, Texas 78234-6000

MEDCOM Regulation
No. 40-35

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Medical Services

MANAGEMENT OF REGULATED MEDICAL WASTE (RMW)

Supplementation of this regulation and establishment of forms other than MEDCOM forms are prohibited without prior approval from HQ MEDCOM, ATTN: MCHO-LOZ.

1. HISTORY. This issue publishes a revision of this publication. Because the publication has been extensively revised, the changed portions have not been highlighted.

2. PURPOSE.

a. To provide guidance to U.S. Army Medical Command (MEDCOM) organizations on the management of regulated medical waste (RMW).

b. To provide regulatory requirements for the management of RMW for facilities located in locations where regulations do not exist or are less stringent than this regulation.

c. To manage RMW in a manner which minimizes occupational exposure, protects both the environment and the public, and ensures compliance with appropriate federal and Department of the Army (DA) regulations.

d. This regulation does not purport to reflect regulatory variations found in many states or overseas jurisdictions. The user of this regulation must ascertain and adhere to state and local requirements. Medical facilities located outside of the United States will reference their host nation Final Governing Standards (FGS) and the Overseas Environmental Baseline Guidance Document (OEBGD).

3. REFERENCES. References are listed in appendix A.

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*This regulation supersedes MEDCOM Regulation 40-35, 22 November 1999.

4. EXPLANATION OF ABBREVIATIONS AND TERMS. Abbreviations and special terms used in this publication are explained in the glossary.

5. APPLICABILITY.

a. This regulation applies to all personnel assigned, attached, or otherwise employed by the MEDCOM and its subordinate activities, to include subordinate commands, medical treatment facilities (MTF), dental activities, veterinary activities, and research facilities. The term "MEDCOM" or "activity" will be used throughout this document referring to MEDCOM and its subordinate activities.

b. This regulation implies that management requires implementing all engineering and administrative controls for bloodborne pathogens, and that employees use standard precautions and wear required Personal Protective Equipment (PPE). The use of standard precautions does not change waste management programs recommended by the Centers for Disease Control and Prevention (CDC) for health-care settings nor does using standard precautions define the classification of waste.

c. MEDCOM activities will dispose of all medical waste according to state and local regulations. Medical facilities operating outside of the continental United States will reference their host nation FGS and the OEBGD.

6. DEFINITIONS.

a. General Waste - waste that is disposed by normal waste disposal methods without pretreatment. This includes garbage, rubbish, and nonregulated medical waste.

(1) Garbage - putrescible solid waste resulting from handling, preparation, cooking, or serving of food.

(2) Rubbish - nonputrescible solid waste comprising two categories:

(a) Organic material. Examples include paper, plastics, cardboard, wood, rubber, and bedding.

(b) Inorganic material. Examples include glass, ceramics, and metal.

(3) Nonregulated Medical Waste - solid material intended for disposal which is produced as the direct result of patient diagnosis, treatment, therapy, or medical research. Such waste is generated in patients' sleeping, treatment, therapy, or isolation rooms (except where the patient is isolated because of an etiologic agent assigned to CDC's Biosafety level 4; see appendix B), and rooms used for diagnostic procedures, doctors' offices, and nursing units. Examples of items included in this category are soiled dressings, bandages, disposable catheters, swabs, used disposable drapes, gowns, masks, gloves, and empty used specimen containers. This waste requires no further treatment and is disposed of as general waste. (Exceptions:

Medical facilities operating outside of the continental United States may need to classify and manage some of the items listed above as medical waste. Personnel working at these facilities should reference the FGS and the OEBGD for additional information.)

b. Regulated Medical Waste - waste generated in the diagnosis, treatment, or immunization of human beings or animals which is capable of causing disease or which, if not handled properly, poses a risk to individuals or a community. These wastes are also called "Infectious Waste," "Biohazardous Waste," "Clinical Waste," "Biomedical Waste," or simply "Medical Waste." Terms will vary based upon locality and will vary from state to state and country to country. Consists of the following categories:

(1) Category 1 - Cultures, Stocks, and Vaccines. Examples include cultures and stocks of infectious agents and associated biologicals, including cultures from medical and pathological laboratories; discarded live and attenuated vaccines; and culture dishes and devices used to transfer, inoculate, and mix cultures.

(2) Category 2 - Pathological Waste. Examples are human pathological wastes, including tissues, organs, body parts, extracted human teeth, and body fluids that are removed during surgery or autopsy, or other medical procedures, and specimens of body fluids.

(3) Category 3 - Blood and Blood Products. Examples include:

(a) Free flowing liquid human blood, plasma, serum, and other blood derivatives that are waste (for example, blood in blood bags, blood and/or bloody drainage in suction containers).

(b) Items such as gauze or bandages, saturated or dripping with human blood, including items produced in dental procedures, such as gauze or cotton rolls saturated or dripping with saliva. Included are contaminated items that could release blood or related fluids if compressed.

NOTE: Products used for personal hygiene (for example, diapers, facial tissues, and feminine hygiene products/sanitary napkins/tampons) that are saturated or dripping with blood are not subject to the requirements of this regulation. Trash receptacles located in public places which contain these products are also not regulated. Personnel need to use judgment in deciding when and where these items, from patients, need to be managed as RMW.

(c) Items caked with dried blood and capable of releasing blood during normal handling procedures.

(4) Category 4 and Category 7 - All Used (Category 4) and Unused (Category 7) Sharps. Examples include sharps used in animal or human patient care or treatment in

medical, research, or support laboratories. This includes hypodermic needles, syringes (with or without the attached needle), Pasteur pipettes, scalpel blades, blood collection tubes and vials, test tubes, needles attached to tubing, and culture dishes (regardless of presence of infectious agents). Other examples include broken or unbroken glassware that was in contact with infectious agents, that is, used slides and cover slips. Syringes used only for irrigation purposes will be managed in accordance with (IAW) state and local policy. Discard unused glassware in boxes designated and labeled for "broken glass"; these boxes are usually found in laboratories.

(5) Category 5 - Animal Waste. Examples include contaminated animal carcasses, body parts, and bedding of animals known to have been exposed to infectious agents[1] during research, production of biologicals, or testing of pharmaceuticals. Carcasses of road kills, euthanized animals, animals dying of natural causes and waste produced by general veterinary practices are not considered Category 5 animal waste.

(6) Category 6 - Isolation wastes, including bedding, from patients or animals with Biosafety Level 4 agents. Examples include biological waste and discarded materials contaminated with blood, excretion exudates, or secretions from humans who are isolated to protect others from highly communicable diseases, or isolated animals known to be infected with highly communicable diseases caused by Biosafety Level 4 agents as shown in Classification of Etiologic Agents on the Basis of Hazard (1974) and Biosafety in Microbiological and Biomedical Laboratories (1999). This category includes pox viruses and arboviruses (shown at appendix B).

(7) Other - Fluids that are designated by the local Infection Control Authority. They may include but are not limited to semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, peritoneal fluid, pericardial fluid, and amniotic fluid. These designated fluids are RMW when free flowing, dripping, or saturated on substrates.

7. GENERAL.

a. Activity personnel will adhere to the principles of pollution prevention by minimizing the use of disposable items, encouraging the use of reusable materials, and recycling to the maximum extent practicable.

b. The activity waste management system includes the segregation, by categories, of waste at the point of origin and the appropriate packaging, transporting, and treatment/disposal of waste in each category. A combination of three basic approaches is used to define regulated medical waste (that is, the infectious characteristics of the waste, the types or categories of waste, and sources of generation).

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[1] To obtain an interpretation about how this term applies at your facility, consult with your Veterinary, Infection Control, and PVNTMED authorities.

c. The activity will assess its entire waste stream to identify areas and processes that generate RMW. A suggested list of areas that generally may or may not generate RMW is shown at appendix C; this list is not all-inclusive.

d. The following items shall NOT be placed into activity trash compaction systems: liquids, RMW, semi-solid waste (food service), empty containers from hazardous laboratory chemicals, unpunctured aerosol cans, chemotherapy and antineoplastic agents, and radioactive substances.

e. RMW and hazardous waste (HW) are different categories of wastes and are classified and managed by separate and distinct regulations. RMW will not be mixed with HW and, conversely, HW will not be mixed with RMW for purposes of disposal.

8. RESPONSIBILITIES.

a. The HQ MEDCOM staff proponent for this regulation is the Assistant Chief of Staff/Director of Logistics, assisted by the Proponency Office for Preventive Medicine and the MEDCOM Environmental Management Office, Directorate of Installations, Environment and Facilities Management.

b. The MEDCOM activity Commander will ensure that RMW is identified and managed according to the policies and procedures provided in this regulation. Where this regulation conflicts with other regulations (for example, state, local, FGS, OEBGD), personnel will follow the most stringent regulation.

c. The Logistics Divisions of MEDCOM activities will arrange for, and supervise the collection, storage, transportation, and disposal of RMW, and the training of personnel in RMW management procedures.

d. Housekeeping, or other designated personnel, will collect and transport RMW to the appropriate FACILITY holding area. They will also ensure that RMW bags are available to the facility staff after normal duty hours.

e. Facility supervisors will establish and use management controls and periodic inspections to ensure compliance with the policies and procedures in this regulation. Supervisors will plan, conduct, and document training of their personnel to ensure that RMW management is conducted safely and in compliance with established policies and procedures.

f. The MTF Preventive Medicine Service will assist the Logistics Division and supervisors by--

(1) Developing local RMW management implementing policies and guidance.

(2) Monitoring all phases of the management of RMW, including collection, storage, transportation, treatment, and disposal.

(3) Providing technical advice in identifying and characterizing RMW.

(4) Participating in the planning and providing of training.

9. PACKAGING, COLLECTING, MARKING, AND HANDLING OF RMW.

a. Segregate RMW from general waste at its point of origin.

(1) General trash. Manage and dispose of general waste according to existing published regulations (that is, existing federal, state, and local requirements; AR 40-5; AR 420-49; and DA Pam 420-47). Place regular trash and recycling containers at appropriate locations in the workplace to make segregation convenient and to minimize improper segregation.

(2) Regulated medical waste. Place items designated as RMW into a regulated medical waste container. Place sharps into a puncture resistant container designated for sharps use. Use RMW bags for all other medical waste items not designated as sharps. Carefully consider placement of bags and take precautions to use them on an "as needed" basis only. (Appendix E identifies areas in the hospital where RMW may be generated and where facilities should consider placing RMW collection containers.)

b. Deposit RMW in leakproof, puncture resistant, plastic bag lined receptacles. Use sturdy, tear resistant, 3 mil thick bags of an installation-specific color (generally red). In areas where RMW is rarely generated (for example, very small labs or clinics), personnel may use bags less than 3 mils thick as interim collection bags provided these thinner bags are placed in 3-mil thick bags prior to transport within the facility. Refer to state and local requirements and ensure bag thickness complies with these regulations. Any state requirement regarding the thickness or strength of the RMW bag for waste collection must be met. Meeting the state requirement takes precedence over the thickness and strength requirement of this regulation.

c. Securely tie and seal medical waste bags. Do not shake or squeeze the bags in an attempt to reduce volume and never compact or crush the waste to make room for more. (Remember: Bags serve as the primary barrier between the regulated medical waste and the worker.) Contact Infection Control for additional instructions on safely sealing and labeling containers to meet your local requirements.

d. Carry sealed bags by their necks to the transportation cart. Do not lift or hold bags by the bottom or sides. Carry bags away from the body. Ensure bags are not broken, opened, or dropped. Never throw the bags into the carts.

e. Wear gloves appropriate for the task when handling bagged RMW. If necessary, obtain guidance from Infection Control, PVNTMED Service, and/or Safety.

f. When transporting RMW (or offering RMW for transport to a disposal contractor) in bulk packagings, use RMW bags that meet the Department of Transportation (DOT) requirements shown in 49 CFR 173.197(e) for tear and impact resistance.

g. Category 1.

(1) Cultures and Stocks. Separate microbiologic waste (cultures and stocks of etiologic agents) from general waste for decontamination. Liquid Category 1 RMW (for example, liquid culture media) may be either steam sterilized and disposed of in the sanitary sewer system or kept in its original glass container and placed in the sharps container for treatment and disposal without using the sanitary sewer system.

(2) Vaccines. Deposit full, partially full, or empty vials of vaccine in sharps containers. Empty carpules from dental procedures may also be placed in sharps containers.

h. Category 2 - Pathological Waste. Dispose of pathological waste inside an RMW container lined with a plastic bag or double bag in RMW bags.

i. Category 3 - Blood and Blood Products. Unless against local, state, or host nation law, bulk blood may be disposed into the sanitary sewer. Dispose of breakable containers of bulk blood or blood products in rigid, puncture-resistant, leak proof containers. Use plastic RMW bags to dispose of blood products such as blood bags and blood filter tubing, and items saturated, dripping, or caked with blood. Remove needles from the tubing (avoiding unsafe manipulation) and place in a sharps container for disposal.

j. Categories 4 and 7 - Sharps. Discard all sharps directly into a rigid puncture-resistant, plastic sharps container immediately after use. Discard disposable needles and syringes intact, and do not cut, break, bend by hand, or recap using a two-hand method. To prevent unauthorized removal of its contents, the containers must be of a tamper-resistant design and will either be locked to a mounting device which is securely fastened to the building structure, or be located in a room or area which is under continuous supervision of ward or clinic personnel (AR 190-51, paragraph 4-20). Locate sharps containers as close as practical to the use area. The size (volume) of the sharps container will be determined by the activity serviced by that container and must meet the requirements of paragraph 13c. Remove and seal the sharps container when it either is 3/4 full or is filled to the line indicated by the manufacturer. Sharps containers mounted on the wall will be positioned at a height to reflect safe use and safety standards for patients and visitors.

k. Category 5 - Animal Waste. Contaminated animal carcasses, body parts, and bedding of animals that are known to have been exposed to infectious agents during research (including those produced in veterinary facilities), production of biologicals, or testing of pharmaceuticals must be managed as RMW and be incinerated. When

implementing this regulation, specify if this type of animal waste is generated at the facility.

l. Category 6 - Isolation Waste (Biosafety Level 4 agents). Consult the Infection Control Officer (ICO) for specific instructions on handling waste that contains Biosafety Level 4 agents (see appendix B).

10. STORAGE OF RMW.

a. Store RMW, excluding pathological waste, in the RMW storage area. Per Occupational Safety and Health Act (OSHA) 1910.1030, identify the main holding area for the activity by affixing a sign bearing an OSHA biohazard symbol and words identifying the item being stored (e.g. regulated medical waste) to the outside of the facility. Keep the main holding area secure, clean, and free from pests (e.g. insects, rats, and animals). Indoor utility and storage rooms do not need to be secured when RMW is collected there unless dictated by local policy.

b. Storage of RMW must not exceed the storage times specified in current contracts for removal and disposal and must not exceed the storage times specified by applicable state or host nation regulations. When conflicts exist, the most stringent time limits will be followed. Unusual or extenuating circumstances will be taken into consideration to allow brief or minor variances from storage time requirements.

c. Refrigerate or freeze pathological waste. Pathological waste generated at the Veterinary Clinic should be stored in the clinic freezer prior to pickup for disposal. The usual time for freezer storage of any RMW is approximately 30 days. Extracted human teeth need <u>not</u> be frozen if they are managed as RMW. Contractual requirements or state/country rules, if more stringent, will be followed.

11. TRANSPORTATION WITHIN THE ACTIVITY.

a. Carts used to transport RMW will be constructed of readily cleanable material, plastic, or stainless steel. If carts are equipped with lids, it is a good management practice is to close the lids when transporting the RMW.

b. Clean carts and any other reusable containers used to transfer RMW using an Environmental Protection Agency (EPA)-registered hospital detergent-disinfectant. Housekeeping (or other designated) personnel will be responsible for timely transportation of waste within the facility, maintenance of carts, and the cleaning on a weekly basis, or more frequently if needed. If a spill occurs, the cart will be cleaned immediately.

c. Put bags of RMW in leakproof, rigid containers and mark the containers with the universal biohazard symbol. Red bags do not need to be marked with the universal biohazard symbol unless required by state or local regulations.

d. RMW from outlying buildings located on the installation or health service area, will be collected on a schedule approved by the facilities' environmental, infection control, and/or safety officials. See paragraph 10b for guidance on storage of RMW.

12. TRANSPORTATION OF RMW ON THE INSTALLATION.

a. RMW destined for disposal will be transported in a government owned or contractor-owned vehicle. The use of privately owned vehicles for transporting RMW is prohibited. The transporting vehicle must be disinfected if a leak or spill occurs during transportation.

b. A spill containment and cleanup kit will be maintained in each vehicle transporting RMW. The kit will include appropriate PPE, a disinfectant approved by the facility, and appropriate absorbent and housekeeping equipment for cleaning up a spill. The kit may either be developed and assembled locally or commercially procured.

c. Requirements under paragraph 13c are optional when moving RMW between buildings that are within the boundaries of the installation (that is, "on post").

13. TRANSPORTATION OUTSIDE INSTALLATION BOUNDARIES.

a. Facilities located outside the continental United States will reference the FGS and OEBGD for specific transportation requirements of RMW.

b. In the continental United States, RMW is defined by the DOT as a hazardous material. When transported in commerce (for example, over public roads), prepare RMW for shipment following the requirements in Title 49, Code of Federal Regulations (CFR) Parts 172, 173, and 177.

c. Prepare shipping papers IAW 49 CFR 172.200 and carry them per 49 CFR 177.817.

(1) Only a DOD certifying official may sign shipping papers IAW DOD 4500.9-R, Defense Transportation Regulations, Part II, chapter 204. A DOD certifying official is a person who has successfully completed an approved DOD hazardous materials certification course and is appointed in writing by his/her activity or unit commander, to include scope of authority.

(2) Shipping papers must include a shipping description [that is, Regulated Medical Waste, 6.2, UN3291, PGII, (*Quantity being shipped)*] and other transportation information.

(3) DD Form 836 (Dangerous Goods Shipping Paper/Declaration and Emergency Response Information for Hazardous Materials Transported by Government Vehicles) (April 2005 or later) is the standard shipping paper used for transporting hazardous materials on government vehicles. See appendix D for an example

pertaining to RMW. When using DD Form 836, adhere to instructions that accompany the form, including filling out DD Form 626 (Motor Vehicle Inspection (Transporting Hazardous Materials)) for vehicle inspection. Alternative shipping papers may be used if they meet transportation requirements.

(4) The shipping activity must maintain a copy of the shipping paper for 2 years after the RMW is accepted by the initial commercial carrier per 49 CFR 172.201(e).

d. Use rigid, leak, resistant packagings (that is, outer containers) that are impervious to moisture, strong enough to prevent bursting during handling, and sealed to prevent leakage during transport. Sharps containers must fit within the outer packaging when off-post transport is required.

(1) Outer shipping containers must meet United Nations and DOT requirements as stated in 49 CFR 173.197. Exceptions apply when RMW is transported by contract carrier (49 CFR 173.134(c)).

(2) The outer container will display the DOT Infectious Substance label whenever the military uses in-house personnel and equipment (that is, not contractors) to transport RMW over public roads for disposal at a commercial treatment facility.

e. Persons who transport RMW over public roads must receive driver's training as specified in 49 CFR 177.816 and AR 600-55. A commercial driver's license (CDL) is not required provided the gross weight of the vehicle used is less than 26,001 pounds. All military and civilian drivers of U.S. government-owned vehicles must have a valid state driver's license and a military driver's license (OF 346 (U.S. Government Motor Vehicle Operator's Identification Card)).

14. MANAGEMENT OF RMW SPILLS.

a. The Infection Control Committee (ICC) and Safety Committee will approve policies and procedures that govern the management of RMW spills.

b. Clean RMW spills immediately with an Environmental Protection Agency (EPA)-registered hospital grade detergent-disinfectant which acts as a mycobacteriacide. Use higher level disinfection when advised by the local or Regional Medical Command (RMC) infection control authority. Carefully follow the manufacturer's instruction regarding the dilution of the detergent-disinfectant and contact time for disinfecting.

c. Aerosolization of RMW is rare. If it should occur, allow the aerosol to settle and isolate the spill until it is safe to begin the cleanup.

d. PPE for cleanup workers.

(1) Wear disposable, waterproof gloves as a minimum.

(2) Wear fluid-impervious gowns or other protective clothing when there is danger of soiling the workers' clothes.

(3) Wear a mask and protective eyewear when there is danger of splashes or aerosols coming in contact with the workers' face and eyes.

(4) Use engineering controls to pick up and dispose of any broken glass and larger volumes of RMW.

(5) Report spills, when required, by following local procedures.

15. TREATMENT/DISPOSAL OF RMW.

a. Render liquid microbiological waste noninfectious via steam sterilization prior to disposal into the sanitary sewer system.

b. Steam sterilize or incinerate solid microbiological waste prior to disposal in the general waste stream.

c. Treatment of blood and blood products is not required prior to their disposal in the sanitary sewer system. When sanitary sewer disposal is not allowed by local ordinance, facilities may need to treat their blood and blood products via steam sterilization or incineration and/or use RMW bags and sharps containers for disposal.

d. Refrigerate or freeze pathological waste if not picked up immediately for disposal (see paragraph 10 for storage guidance).

e. Decontaminate wastes containing CDC Biosafety Level 4 etiologic agents (appendix B) by steam sterilization, incineration, or other approved disposal technology prior to disposal. Consult the ICO for further guidance.

f. Vaccine waste requires no treatment prior to steam sterilization or incineration.

g. Sharps containers require no treatment prior to incineration (or other approved disposal technologies) unless required by the state.

h. Store nonpathological RMW, destined to be picked up by the disposal contractor, in the designated RMW storage area (see paragraph 10 for storage guidance).

16. CONTINGENCY PLANNING.

a. Activities will maintain detailed contingency plans for RMW disposal as a means of managing medical waste when primary means of disposal are limited or prohibited. Minimally, review and update these plans annually. (Contingency plans will meet all local, state, and federal regulations.) The activity contracting officer can provide

information on contingency disposal of RMW. Verify with the activity contracting officer that a contingency plan is in place.

b. Optional methods of disposal are shown in appendix E.

c. Special circumstances. RMW that has Biosafety Level 4 agents will pose problems for transportation, treatment, and disposal. Companies holding contracts for routine RMW removal and disposal are likely to refuse to accept RMW containing Biosafety Level 4 agents. See appendix E for alternative disposal methods.

d. Casualty/trauma decontamination. Following a suicide, violent death, or severe training accident, major blood contamination may occur on many and varied surfaces. Only properly equipped and sufficiently trained personnel shall clean up these spills. Employing, by contract, a private company that is skilled in this type of job is recommended. If properly trained, preventive medicine personnel may assist in the cleanup. However, their primary mission is to advise installation personnel assisting in the cleanup on appropriate PPE and cleaning/sanitizing solutions. They should coordinate with the ICO and the installation (or site) safety officials for additional input and guidance per the installation (or site) exposure control plan.

e. Emergency Management. MTFs will plan for and exercise emergency management topics pertaining to waste management as part of their enhanced and focused Joint Commission on Accreditation of Healthcare Organizations (JCAHO) survey preparations.

17. GENERATOR FEES.

a. Facility personnel will weigh and record RMW prior to off-site shipment and maintain records for a minimum of 3 years.

b. All activities, regardless of the amount of RMW produced, must determine if generator, transporter, disposal, or other appropriate fees are required per state and local regulations. Activities must coordinate with the local Judge Advocate General's Office for a review of these requirements.

c. The MEDCOM environmental program funding documents should reflect the funding fees related to RMW disposal and expenses needed to comply with environmental regulations. Obtain additional guidance on this requirement from the preventive medicine office.

18. TRAINING REQUIREMENTS.

a. Commanders will ensure that all employees are adequately trained to perform their duties.

b. Employers will train all activity employees who come in direct contact with patients, or who generate, segregate, package, store, transport, treat, or dispose of RMW, in the safe handling and management of RMW.

(1) The training should cover topics pertinent to the employee's primary job. (Consult the ICO, Safety Manager, Waste Coordinator, or Collateral-Duty Safety Officer at the activity for technical assistance in determining pertinent information to be included in the training.)

(2) The training will include topics related to general awareness, specific function, safety, and security. Persons who sign shipping papers will receive specific training (see paragraph 13b). Drivers will receive driver's training (see paragraph 13e). Contractors whose duties involve handling or transporting RMW will have training that includes the topics discussed in this paragraph.

c. Initial training will include an orientation of local RMW worksite policies and procedures before the employee begins work. Recurrent training is required every 2 years and will include a discussion of worksite policies, procedures, and new technologies. Conduct of bloodborne pathogen training is IAW the activity's Exposure Control Plan.

d. The department/service/activity managers/leaders will maintain written documentation of all training for 3 years. Documentation will include topic(s), content summary, date, length of training, printed name and signatures of all attendees.

e. Department/service/activity managers/leaders will monitor and evaluate the training. Training topics will reflect assessment of the needs of the work center. For example, an increase in needle sticks may indicate a need to increase training in use of sharps disposal systems.

f. Only qualified instructors (personnel who are knowledgeable in the subject area and have had formal and extensive training in the material) may instruct classes and oversee training to meet these requirements. Training personnel should consider instructor work experience and technical competence (knowledge of the subject matter) when making instructional assignments.

APPENDIX A

REFERENCES

AR 40-5, Preventive Medicine

AR 40-61, Medical Logistics Policies and Procedures

AR 190-51, Security of Unclassified Army Property (Sensitive and Nonsensitive)

AR 200-1, Environmental Protection and Enhancement

AR 385-10, The Army Safety Program

AR 420-49, Utility Services

AR 600-55, The Army Driver and Operator Standardization Program (Selection, Training, and Licensing)

DA Pam 420-47, Solid Waste Management

TB MED 530, Occupational and Environmental Health Food Service Sanitation, (under revision)

Title 49, Code of Federal Regulations, Transportation, Parts 100-185, latest edition

DOD 4500.9-R, Defense Transportation Regulation - Part II, Cargo Movement, November 2004

CDC Guidelines for Handwashing and Hospital Environmental Control, 1985. Source: http://www.cdc.gov/ncidod/hip/guide/handwash_pre.htm

CDC Guidelines for Isolation Precautions in Hospitals January 1996. Source: http://www.cdc.gov/ncidod/hip/ISOLAT/Isolat.htm

Biosafety in Microbiological and Biomedical Laboratories, 4th Edition, Centers for Disease Control and Prevention, Atlanta, Georgia, May 99. Source: http://www.cdc.gov/od/ohs/biosfty/bmbl4/bmbl4toc.htm)

EPA Guide for Infectious Waste Management, U.S. Environmental Protection Agency, May 1986. (EPA 530-SW-86-014)

Military Item Disposal Instructions, U.S. Army Center for Health Promotion and Preventive Medicine http://chppm-www.apgea.army.mil/newmidi/

Centers for Disease Control, Office of Biosafety. 1974. *Classification of Etiologic Agents on the Basis of Hazard*, 4th Edition. U.S. Department of Health, Education and Welfare, Public Health Service

JCAHO 2006 Hospital Accreditation Standards (HAS), Environment of Care chapter

Occupational Safety and Health Act (OSHA) 1910.1030

APPENDIX B

The CDC classifies the following etiologic agents as Biosafety Level 4 agents:

Junin
Congo-Crimean hemorrhagic fever
Marburg
Machupo virus
Ebola
Anthrax
Lassa virus
Smallpox (and smallpox-like cases)
Herpesvirus simiae (Monkey B virus)
Central European Tick-borne encephalitis virus complex.
- Absettarov virus
- Hanzalova
- Hypr
- Kumlinge virus
- Kyasanur forest disease (Presbytis spp.)
- Omsk hemorrhagic fever
- Russian Spring-Summer encephalitis
- Central European encephalitis viruses
- Far Eastern subtypes

Sabia virus

Plus other emerging pathogenic microorganisms when designated by CDC or other Public Health officials

SOURCE:
Biosafety in Microbiologic and Biomedical Laboratories, Centers for Disease Control and Prevention, Atlanta, Georgia, May 99,
ttp://www.cdc.gov/od/ohs/biosfty/bmbl4/bmbl4toc.htm

NOTE: The World Health Organization (WHO) classifies etiological agents into four distinct Risk Groups. Those agents listed as Risk Group 4 usually cause serious human or animal diseases and that can be readily transmitted from one individual to another, directly or indirectly, and for which effective treatments and preventive measures are not usually available. There is high risk to individuals and high risk to the community.

Many of the WHO Risk Group 4 agents are the same as those which the CDC places in the Biosafety Level 4 category. Personnel using this MEDCOM Regulation 40-35 should understand that a Biosafety Level 4 agent and a WHO Risk Group 4 agent have the same meaning for the purposes of this regulation.

APPENDIX C

Suggested Examples of Generation Sites in a Medical Treatment Facility

1. All areas must use a rigid, puncture resistant, sharps container for disposal if they generate sharps [sharps used in animal or human patient care, or treatment in medical, research, or support laboratories (including hypodermic needles, syringes (with or without the attached needle)], Pasteur pipettes, scalpel blades, blood collection tubes and vials, test tubes, needles attached to tubing, and culture dishes (regardless of presence of infectious agents). Other types of broken or unbroken glassware that were in contact with infectious agents, such as used slides and cover slips, are also included in this category.

2. All administrative areas that have a direct or indirect patient contact and generate nonregulated medical waste. The waste generated is general waste and will be disposed of as such.

- Headquarters.
- Patient Administration.
- Personnel.
- Logistics.
- Plans, Training, Mobilization and Security.
- Nutrition Care.
- Resource Management.
- Information Management.
- Nursing Education and Staff Development.

3. The following areas with direct and indirect patient contact generally generate nonregulated medical waste. The waste generated is general waste and will be disposed of as such. Sharps generated in these areas are always considered RMW.

- Allergy/Immunization clinics.
- Social Work Service.
- General outpatient clinics.

- Pediatric clinics.
- Optometry/Ophthalmology clinics.
- Orthopedic clinic including brace shop.
- Radiology including ultrasound.
- Pharmacy service.
- Occupational Health clinic.
- Physical Examination.
- Community Mental Health clinic.
- Veterinary Service if not engaged in research.
- Urology clinic.
- Neurology/Neurosurgical clinic.
- Ear, Nose and Throat (verify if free flowing/saturated/dripping/caked blood).
- Central Material section.
- General patient units.

4. The following areas with direct patient care contact generate regulated medical waste (selected items) and will be disposed of as such. Sharps generated in these areas are always considered RMW.

- Operating room.
- Pathology service.
- Laboratory services.
- Blood donor centers (only in draw areas).
- Critical care areas.
- Recovery room.

- Dental clinics.
- Veterinary Clinics.

APPENDIX D

Shipping Paper and Emergency Response
Information for Hazardous Materials Transported
by Government Vehicles
(DD Form 836)

DANGEROUS GOODS SHIPPING PAPER/DECLARATION AND EMERGENCY RESPONSE INFORMATION FOR HAZARDOUS MATERIALS TRANSPORTED BY GOVERNMENT VEHICLES

1.a. NOMENCLATURE:
b. MODEL NO.:
c. BUMPER NO.:
d. CONTAINER SEAL NO.:
e. SERIAL NO.:
f. TCN NUMBER:

2. SHIPPER NAME/ADDRESS/TELEPHONE NO./DATE OF PREPARATION

3. PAGE ____ OF ____ PAGES

4. CARGO *(To be completed by the unit or shipper Transportation Office (TO))*

PROPER SHIPPING NAME *(Include RQ, Technical Names, Additional Information per 49 CFR172.203, as required.)* a.	HAZARD CLASS/ DIVISION b.	SUBSIDIARY HAZARD c.	UN/ID NUMBER d.	PACKING GROUP (PG) e.	PACKAGES NUMBER f.	PACKAGES KIND g.	TOTAL NET QUANTITY h.	TOTAL AMMO (NEW) i.
Regulated Medical Waste	6.2		UN3291	II				

5. CONSIGNEE NAME

6. REMARKS

7.a. COPY OF EMERGENCY RESPONSE GUIDE NUMBER(S)

b. EMERGENCY NOTIFICATION. In all cases of accident, breakdown or fire, promptly call emergency assistance telephone number(s) in Item 7c below and then shipper and/or consignee in Item 2 above, in that order.

c. 24-HOUR EMERGENCY ASSISTANCE TELEPHONE NUMBERS:

DOD NON-EXPLOSIVE HAZMAT:	DOD HAZ CLASS 1 (EXPLOSIVES) ONLY:	CHEMICAL/BIOLOGICAL WARFARE MATERIAL DUTY HOURS:	SECURE HOLDING:	DOD RADIOACTIVE MATERIALS:
1-800-851-8061 **1-804-279-3131** (FOR CALLS FROM SHIPS AT SEA)	**(703) 697-0218 or 0219** (COLLECT) OR **DSN 227-0218** (WATCH OFFICER)	**DSN 584-3044, 584-7211, 584-6455, Comm. (410) 436-3044, (410) 436-7211, (410) 436-6455** AFTER DUTY HOURS: **DSN 584-2148, Comm. (410) 436-2148** (Ask for TEU S3)	**1-800-524-0331** OIL AND CHEMICAL SPILLS: NATIONAL RESPONSE CENTER (NRC) AND TERRORIST HOTLINE: **1-800-424-8802** AT SEA: **202-267-2675** (COLLECT)	ARMY: **(703) 697-0218** (COLLECT) USAF: **(202) 767-4011** (COLLECT) USN/MC: Use 24-hour emergency response phone number provided by USN/MC activity initiating shipment. DLA: **(717) 770-5283** (COLLECT)

8. SHIPPER'S CERTIFICATION

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the regulations of the Department of Transportation.

a. TYPE OR PRINT NAME OF SHIPPER CERTIFIER

b. SIGNATURE OF SHIPPER CERTIFIER AND DATE

c. SIGNATURE(S) OF VEHICLE OPERATOR(S)

DD FORM 836, APR 2005 PREVIOUS EDITION IS OBSOLETE.

APPENDIX E

Disposal/Treatment Methods**

Source/Type of Medical Waste	Regulated	Treatment/Disposal Method
Microbiologic cultures/stocks	Yes	Incineration, Thermal inactivation, Chemical disinfection (for liquids only), Steam sterilization followed by incineration or grinding (check w/ state/local regulations if end product should be unrecognizable)
Pathological waste (includes surgery and autopsy waste)	Yes	Incineration, Steam sterilization followed by incineration or grinding (check w/ state/local regulations if end product should be unrecognizable)
Blood/blood products, caked blood including blood bags and tubing.	Yes. Only if free flowing, saturated, dripping, or caked.	Steam sterilization, Incineration, Sanitary sewer system for liquids
"Sharps" both used and unused	Yes	Incineration, Steam sterilization followed by incineration or grinding (check w/ state/local regulations if end product should be unrecognizable)
Vaccine	Yes	Incineration, Steam sterilization followed by incineration or grinding (check w/ state/local regulations if end product should be unrecognizable)
Contaminated animal carcasses, body parts, and bedding	Yes	Incineration, Steam sterilization followed by incineration or grinding (check w/ state/local regulations if end product should be unrecognizable)

Communicable Disease Isolation	No, except for Biosafety Level 4 or WHO Risk Group 4 agent.	Check with ICO for guidance, Steam sterilization, Incineration
Dialysis waste	Optional	Steam sterilization
Treatment/Examination Room*	No	General waste
General patient care areas*	No	General waste
Dental Operatory*	Yes, only if free flowing, item saturation, dripping, or caked with blood.	Stem sterilization, Incineration, Sanitary sewer system for liquids
Intravenous bags and intravenous tubing	Check with state regulations	Steam sterilization, Incineration

* Unless the wastes fall into one of the categories above.

**More stringent state codes may require more stringent treatment/disposal methods.

NOTE: When the treatment/disposal methods shown above are not appropriate or feasible for the local situation, contracting for the transport and disposal of RMW is recommended. For planning purposes, activities must assume that RMW contractors will not accept for transportation any RMW that contains WHO Risk Group 4 or Biosafety Level 4 agents. Furthermore, activities should assume that commercial RMW treatment companies will refuse to accept for treatment and disposal any RMW that contains WHO Risk Group 4 or Biosafety Level 4 agents.

GLOSSARY

Section I
Abbreviations

BMBL.....Biosafety in Microbiological and Biomedical Laboratories

CDC .....Centers for Disease Control and Prevention

CDL.....Commercial Driver's License

CFR.....Code of Federal Regulations

DA.....Department of the Army

DENTAC.....Dental Activity

DOD.....Department of Defense

DOT.....Department of Transportation

EPA.....Environmental Protection Agency

FGS.....Final Governing Standards

HW.....Hazardous Waste

IAW.....In Accordance With

ICC.....Infection Control Committee

ICO.....Infection Control Officer

JCAHO.....Joint Commission on Accreditation of Healthcare Organizations

MEDCEN.....U.S. Army Medical Center

MEDCOM.....U.S. Army Medical Command

MEDDAC.....Medical Department Activity

MTF.....Medical Treatment Facility

OEBGD.....Overseas Environmental Baseline Guidance Document

OF.....Optional Form

POC.....Point of Contact

PPE.....Personal Protective Equipment

PVNTMED.....Preventive Medicine

RMC.....Regional Medical Command

RMW.....Regulated Medical Waste

SOP.....Standing Operating Procedure

USACHPPM.....U.S. Army Center for Health Promotion and Preventive Medicine

VETCOM.....U.S. Army Veterinary Command

WHO.....World Health Organization

Section II
Terms

This section contains no entries.

The proponent of this publication is the U.S. Army Center for Health Promotion and Preventive Medicine. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) to Commander, U.S. Army Medical Command, ATTN: MCHO-LOZ, 2050 Worth Road, Fort Sam Houston, TX 78234-6000.

FOR THE COMMANDER:

WILLIAM H. THRESHER
Chief of Staff

VASEAL M. LEWIS
Colonel, MS
Assistant Chief of Staff for
Information Management

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